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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,548	09/15/2000	Nobuyuki Kita	019519-267	1924
7590 07/15/2004			EXAMINER	
Platon N Mandros Burns Doane Swecker & Mathis LLP P O Box 1404 Alexandria, VA 22313-1404			GILLIAM, BARBARA LEE	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/662,548

Applicant(s)

KITA ET AL.

Examiner

Barbara Gilliam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6-9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 13/9, 14, 16 is/are allowed.
- 6) ☒ Claim(s) 6-8, 11, 12, 13/6, 13/7 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment filed April 6, 2004 has been received and fully considered.
  - a. The 35 USC 112, 1<sup>st</sup> paragraph rejection is withdrawn.
  - b. Claims 6-9, 11-16 are present. Claims 1-5 and 10 are canceled.
2. The notation x/y has been used to identify the multiple dependent claims. For example 13/6 represents claim 13 as dependent on claim 6.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 6-7, 12/6, 12/7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vermeersch et al. in view of Gardner et al.
  - a. In US 6,210,857, Vermeersch et al. claim a heat-sensitive imaging element for providing a lithographic printing plate, comprising a lithographic base with a hydrophobic oleophilic surface and a top layer comprising a compound capable of converting light into heat and a hydrophilic polymer, characterized in that the hydrophilic polymer is crosslinked (claim 1). The top layer comprises colloidal silica (claim 7), which may be in the form of any commercially available water-dispersion of colloidal silica (column 5, lines 6-22). The colloidal silica meets the present limitations

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for the colloidal sol (colloid in solution) because it can be any commercially available water-dispersion of colloidal silica. As hydrophilic binder, there may be used homopolymers and copolymers of vinyl alcohol, acrylamide, methylol acrylamide, methylol methacrylamide, acrylic acid, methacrylic acid, hydroxyethyl acrylate, hydroxyethyl methacrylate or maleic anhydride/vinylmethylether copolymers (column 4, lines 55-65). In Example 1, 13-wt% of the solid content of the coating solution is hydrophilic binder.

b. Vermeersch et al. do not teach a protective cover layer however it would have been obvious to incorporate a protective cover layer based on the teachings of Gardner, Jr. et al. In US 5,939,237, Gardner, Jr. et al. teach a no-process printing plate forming photosensitive article having a protective top coat layer. The protective top layer may provide the no-process printing plate with protection from contamination during handling, improved suppression of odors during imaging and improved roll-up performance on press. The hydrophilic protective top coat layer is removed on press by action of the fountain solution and/or ink (abstract & column 8, lines 6 – 60).

c. Therefore it would have been *prima facie* obvious to one of ordinary skill in the art to coat the imaging element of Vermeersch et al. with a protective cover layer to protect the imaging element from contamination during handling based on the teachings of Gardner, Jr. et al. wherein the imaging element comprises a lithographic base with a hydrophobic oleophilic surface and a top layer comprising a compound capable of converting light into heat and a crosslinked hydrophilic polymer.

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5. Claims 8, 11, 12/8, 13/6, 13/7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vermeersch et al. in view of Teng.

a. As indicated in the corresponding rejections, Vermeersch et al. (US 6,210,857) claim a heat-sensitive imaging element for providing a lithographic printing plate, comprising a lithographic base with a hydrophobic oleophilic surface and a top layer comprising a compound capable of converting light into heat and a hydrophilic polymer, characterized in that the hydrophilic polymer is crosslinked (claim 1). Vermeersch et al. do not teach using a substrate that has been treated for adhesion purposes. It would have been obvious to subject the substrate of Vermeersch et al. to conventional techniques known to improve adhesion between the substrate and top layer such as mechanical graining or brushing, chemical etching and/or AC electrochemical graining as taught by Teng (US 6,014,929; column 10, lines 38-58).

### ***Response to Arguments***

6. Applicant's arguments filed April 6, 2004 have been fully considered but they are not persuasive.

a. Applicant removed the new matter from Claim 6 and submitted that Claim 6 and the claims depending therefrom are in condition for allowance since it was not subject of any rejection on prior art grounds. Claims 6, 12/6, 13/6 (absent new matter) are obvious in light of the combination of Vermeersch et al. in view of Gardner et al. as pointed out in the above rejections and in previous Office Actions prior to the amendment inserting the new matter. Applicant argued that the combination of Vermeersch et al. and Gardner, Jr. et al. is non proper because Vermeersch et al. does

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not disclose the need for a protective layer and the construction in Vermeersch et al. is different from that of Gardner, Jr. et al. The Examiner respectfully disagrees. As pointed out in the rejection above, it is very common in the printing plate art to provide a protective layer on the imageable surfaces of printing plates precursors. Gardner, Jr. et al specifically teaches a protective layer that reduces odor in addition to protecting the plate from contamination. Teng also supports this position. In US 6,387,595, Teng teaches an on-press developable lithographic printing plate comprising an ultrathin overcoat.

***Allowable Subject Matter***

7. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

a. There is no teaching or suggestion in Vermeersch et al., Gardner, Jr. et al. or Teng that would motivate one of ordinary skill in the art to add a light to heat conversion layer to the hydrophilic protective layer as required in the present claims.

9. Claims 9, 13/9, 14, 16 are allowed.

10. The following is a statement of reasons for the indication of allowable subject matter:

a. Applicant's arguments with respect to independent Claim 9 (and therefore the claims dependent thereon) are convincing.

### ***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara Gilliam whose telephone number is 571-272-1330. The examiner can normally be reached on Monday through Thursday, 8:00 AM - 5:30 PM.

a. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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b. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Barbara Gilliam  
Examiner  
Art Unit 1752

bg  
July 12, 2004